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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,663	01/18/2002	Vernon M. Ingram	M00656/70071 (JRV)	3098

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EXAMINER	
CELSA, BENNETT M	

ART UNIT	PAPER NUMBER
1639	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/051,663	Applicant(s) INGRAM ET AL.	
	Examiner Bennett Celsa	Art Unit 1639	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 March 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): obviousness rejections.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: *49*.
   Claim(s) rejected: *29*.
   Claim(s) withdrawn from consideration: *34*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attached continuation of advisory action..
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

Bennett Celsa
Primary Examiner
Art Unit: 1639

Advisory Action: Cont.

Status of the Claims

Claims 29, 34 and 49 are pending.

Claim 34 is withdrawn from consideration as being directed to a nonelected invention.

Claims 29 and 49 are under consideration.

Allowable Subject Matter

1. Claim 49 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Withdrawn Objection (s) and/or Rejection (s)

Applicant's arguments directed to the obviousness rejections of claim 29 and 49 as being obvious under 35 U.S.C. 103(a) over Buxbaum Pat No. 5,385,915 (1/95) alone or further in view of Ingram et al. PG PUB US 2003/0114510A1 (6/03) as evidence of inherency (item 8 in the prior office action) and further in view of WO 98/30229 (7/98) or Sharpe were found persuasive. Additionally, the teaching of tyrphostin in Buxbaum would not provide sufficient motivation to one of ordinary skill in the art to select DAPH1 from the Sharpe reference due to the nonalaogous structure of tyrphosin and DAPH1 and the large number of structurally unrelated Sharpe compounds drawn to different generics disclosed in the Sharpe reference.

Outstanding Objection(s) and/or Rejection (s)

1. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (lack of written description).

It is first noted that written description is legally distinct from enablement: AAlthough the two concepts of are entwined, they are distinct and each is evaluated under separate legal criteria. The written description requirement, a question of fact, ensures the that the inventor conveys to others that he or she had possession of the claimed invention; whereas, the enablement requirement, a question of law, ensures that the inventor conveys to others how to make and use the claimed invention.≅ See 1242 OG 169 (January 30, 2001) citing *University of California v. Eli Lilly & Co*

With regard to the description requirement, Applicants' attention is directed to The Court of Appeals for the Federal Circuit which held that a "written description of an invention involving a chemical genus, like a description of a chemical species, >requires a precise definition, such as by structure, formula [or] chemical name," of the claimed subject matter sufficient to distinguish it from other materials." *University of California v. Eli Lilly and Co.,* 43 USPQ2d 1398, 1405 (1997), quoting *Fiers v. Revel,* 25 USPQ2d 1601, 1606 (Fed. Cir. 1993) (bracketed material in original)[The claims at issue in *University of California v. Eli Lilly* defined the invention by function of the claimed DNA (encoding insulin)].

The *Lilly* court sets forth a two part test for written description: A description of a genus of cDNA's may be achieved by means of a recitation of:

1. a representative number of cDNA's, defined by nucleotide sequence, falling within the scope of the genus Or

2. of a recitation of structural features common to the members of the genus.

See *Regents of the University of California v. Eli Lilly & Co.* 119 F.3d 1559 (Fed. Cir. 1997) at 1569.

The present claim is directed to: A composition comprising:

a. DAPH1 (4,5-dianilinophthalimide) AND

b. one or more compounds that '*decrease neuronal calcium influx by beta amyloid protein degradation products*'.

In support thereof of item b. above, the specification merely provides a handful of compounds corresponding to item b. (e.g. Non-NMDA channel antagonist compounds, decoy peptides) in which functional/mechanistic properties are not correlative to a single compound core structure. See e.g. Ingram et al. PG PUB US 2003/0114510A1 (6/03) (of present application) at pages 1-7.

In the present instance, neither the specification nor the claims provide:

1. A recitation of structural features common to the members of the Agenera≅ corresponding

to "*compounds that decrease neuronal calcium influx by beta amyloid protein degradation products" OR*

2. a representative number of compounds that decrease neuronal calcium influx caused by aggregated beta-amyloid protein degradation products..

Accordingly, neither the specification nor claims demonstrate possession of the presently claimed function/mechanistic claimed generics.

Discussion

Applicant's arguments directed to the above written description rejection were considered but deemed nonpersuasive for the following reasons.

Applicant first argues that the Lilly criteria are pertinent only to cDNA's not to non-DNA compounds e.g. calcium influx caused by aggregated amyloid.

This argument is not persuasive since both the MPEP and relevant caselaw (e.g. *University of Rochester*) therein have applied written description and the Lilly analysis to non-DNA compounds. See e.g. Guidelines for Examination of Patent Applications Under the 35 USC 112, first paragraph, 'Written Description' Requirement" published in 1242 OG 168-178 (January 30, 2001); and Univ. Of Rochester v G. D. Searle and Co., 69 USPQ2d 1886 (CAFC Feb. 13, 2004).

Applicant further argues that structure or representative examples is not the only way to satisfy written description and that decoy peptides and non-NMDA channel antagonists are well known in the art.

This argument was considered but deemed nonpersuasive for the following reasons.

Initially it is noted that there is no *per se* test for satisfying written description; but the MPEP and recited case law provide an analysis (which the Examiner employs) for determining whether written description has been met.

Secondly, whether non-NMDA channel antagonists or decoy peptides are known in the art is not the proper inquiry. The issue is whether the specification has provided a sufficient showing to demonstrate possession of the presently claimed invention.

In this respect, Applicant argues that the specification provides an adequate written description of compounds that decrease calcium influx of neuronal cells caused by aggregated β-amyloid (Aβ) protein degradation products since the specification describes:

a. Decoy peptides (e.g. pp. 9,16);

b. A number of non-NMDA antagonists (see pp 16-17); and

c. Other antagonists of calcium channels (see page 16) including NMDA antagonists such as DL-AP5 (see Example 1, p. 30);

which, although structurally different, would nevertheless, given the knowledge in the art of these compounds, be viewed as representative of compounds that decrease calcium influx of neuronal cells caused by aggregated β-amyloid (Aβ) protein degradation products.

This argument was considered but deemed nonpersuasive for the following reasons.

As recognized by the courts, '[T]he written description requirement can be met by showing that an invention is complete by disclosure of sufficiently detailed, relevant,

identifying characteristics ... i.e. complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with known or disclosed correlation between function and structure, or some combination of such characteristics. *Enzo Biochem. Inc. V. Gen-Probe Inc.* 296 F.3d 1316,1324, 63 USPQ2d 1609,1613 (Fed. Cir. 2002).

In the present instance, Applicant's claimed composition comprising **compounds that decrease calcium influx of neuronal cells caused by aggregated β-amyloid (Aβ) protein degradation products** which represents a 'vague functional description' [1] which lacks any structural feature (e.g. core structure) common to compounds that decrease calcium influx; nor is there sufficiently detailed, relevant, identifying characteristics ... i.e. complete or partial structure, other physical and/or chemical properties to provide an adequate written description. Even though the specification provides specific examples of 'decoy peptides' and an NMDA antagonist (e.g. DL-AP5) these compounds are structurally distinct and do not establish a known or disclosed correlation between function and structure sufficient to provide adequate written description; nor do these disclosed compound provide functional/mechanistic properties which are correlative to a single compound core structure(s).

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[1] The claimed phrase Aa non-steroidal compound that selectively inhibits activity of the PGHS-2 gene product≅ was labeled by the CAFC as a Avague functional description≅. See *University of Rochester v. G.D. Searle & Co.*, 69 USPQ 2d 1886,1895 (CAFC 2004).

Accordingly, as pointed out in the rejection above, applicant's claim to a 'vague functional description' and the limited numbers of specification examples fail to provide:

1. A recitation of structural features common to the members of the 'genera' corresponding
to '*compounds that decrease neuronal calcium influx by beta amyloid protein degradation products' OR*
2. a representative number of compounds that decrease neuronal calcium influx caused by aggregated beta-amyloid protein degradation products.

Thus, neither the specification nor claims provides an adequate written description of compounds that decrease calcium influx of neuronal cells caused by aggretated β-amyloid (Aβ) protein degradation products as presently claimed.

Accordingly, the above written description rejection is hereby maintained.

Further Correspondences

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Celsa whose telephone number is 571-272-0807. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bennett Celsa
Primary Examiner
Art Unit 1639

BC
April 12, 2005